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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,995	08/06/2001	Anil Kumar Meka	ADEP-001	6895

26392 7590 02/23/2005

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EXAMINER

UNGAR, DANIEL M

ART UNIT	PAPER NUMBER
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2132

DATE MAILED: 02/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/921,995

Applicant(s)

MEKA, ANIL KUMAR

Examiner

Daniel M. Ungar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

***DETAILED OFFICE ACTION***

1. Claims 1-19 have been examined.

***CLAIM OBJECTIONS***

2. Claims 1 and 17 are missing the word "to" between "sender" and "generate". The claims recite, "containing an user input", when they should read, "a user input". The claims recite, "a first signature based on a first data". As "data" is plural, the claims should read, "based on first data", making them consistent with the following line, "based on second data". Appropriate correction is required.

***CLAIM REJECTIONS - 35 U.S.C. 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 11 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the limitation "the corresponding section." It is unclear what "the corresponding section" refers to. The limitation lacks adequate antecedent basis.

***CLAIM REJECTIONS - 35 U.S.C. 101***

5. 35 U.S.C. 101 reads as follows:  
Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
6. Claim 16 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter. Methods alone not implemented in any tangible technology are not considered statutory subject matter. See MPEP 2106.

***CLAIM REJECTIONS - 35 U.S.C. 102***

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al., U.S. Patent Number 5,465,299.

8. Regarding claims 1 and 17, Matsumoto et al. disclose a method and a computer system for enabling a sender to send documents comprising:

enabling the sender to generate an electronic file containing user input (see column 6, lines 20-21);

generating a first digital signature based on a first data containing user input (see column 6, lines 17-49);

generating a second digital signature based on second data containing user input wherein the second data is different from the first data (see column 6, lines 50-60);

sending the first and second digital signatures to a receiver system, which verifies the integrity of the user input by using one of the first and second digital signatures (see column 6, line 61 - column 7, line 33).

9. Regarding claim 2, Matsumoto et al. disclose the first data comprising user input only (see column 6, lines 17-35), and the second data comprising an electronic file containing user input (see column 6, lines 50-60).

10. Regarding claim 3, Matsumoto et al. disclose the second data comprising a user signature, (see column 6, lines 36-60; figure 2a, item 113c) and the electronic file comprises an electronic document (see column 6, lines 61-66). Note the communication message meets the limitation of an electronic file comprising an electronic document.

11. Regarding claim 9, Matsumoto et al. disclose generating a plurality of content digital signatures, wherein each content digital signature is based on user input contained in a portion of the electronic document (see column 6, lines 17-35; figure 2b).
12. Regarding claim 10, Matsumoto et al. disclose storing a control section associated with the electronic document which includes audit information associated with at least one content digital signature (see column 6, lines 37-49; column 11, lines 52-63).
13. Regarding claim 11, Matsumoto et al. disclose storing a control section associated with the electronic document which includes a rule associated with at least one of the content digital signatures, wherein the rule specifies an action either permitted or prohibited against the corresponding section (see column 6, lines 21-26). Note that the fixed data portion of the document has rules regarding who can modify it.
14. Regarding claims 13 and 18, Matsumoto et al. disclose a method and computer system for enabling a receiver to receive electronic documents, comprising receiving a first data containing a user input and at least a first and second digital signature, which are generated based on data containing the user input, and examining the first and/or second signature to determine the integrity of the user input (see column 7, line 9 – column 8, line 2).
15. Regarding claim 14, Matsumoto et al. disclose the first data containing a user signature (see column 6, lines 7-16), and the user input is contained in an electronic document (see column 6, lines 7-60). Note that without the limitation of a biometric signature, a digital signature by a user is a user signature.
16. Regarding claim 15, Matsumoto et al. disclose the first signature(s) (up to the document signature by signatory C) generated on the basis of user input only, and the second signature generated on the basis of the electronic document (see column 6, lines 7-26 and 50-60).

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17. Regarding claim 16, Matsumoto et al. discloses a method of generating documents comprising:

enabling a user to generate an electronic document comprising a plurality of portions and to specify a rule associated with each of the plurality of portions (see column 6, line 7-26). Note that the document disclosed contains at least two portions, a fixed data area and an additional data area, each with a rule regarding modifiability (see also column 11, lines 17-33).

generating a digital signature associated with each of the plurality of portions (see column 6, lines 21-35);

including a control section in the electronic document, wherein the control section specifies rules associated with the corresponding portions (see column 6, lines 43-49; column 11, lines 52-63; figure 6a, item 412b).

18. Regarding claim 19, Matsumoto et al. discloses set of instructions on computer readable medium for enabling a sender to send documents comprising:

enabling the sender to generate an electronic file containing user input (see column 6, lines 20-21);

generating a first digital signature based on a first data containing user input (see column 6, lines 17-49);

generating a second digital signature based on second data containing user input wherein the second data is different from the first data (see column 6, lines 50-60);

sending the first and second digital signatures to a receiver system, which verifies the integrity of the user input by using one of the first and second digital signatures (see column 6, line 61 - column 7, line 33).

***CLAIM REJECTIONS - 35 U.S.C. 103(a)***

19. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. Where Matsumoto et al. disclose the first and second signatures (column 6), they fail to

explicitly disclose their invention utilizing the same hash operation for both signatures. However, they disclose that the related prior art generates a first digital signature of a document, and then a second digital signature using the same hash operation as in the first digital signature (see column 1, line 61 – column 2, line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to have used the same hash operation for both signatures to save space in memory by only storing one operation, especially considering that the security of a digital signature is based on the keys of the hashes, not the diversity of the hash operations.

20. Claims 5, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al., as established above, in view of Smithies et al., U.S. Patent Number 5,647,017.

21. Regarding claims 5 and 6, Matsumoto et al. do not disclose user signatures comprising biometric and handwritten signatures. However, in a similar field of endeavor, Smithies et al. disclose a handwritten signature of the sender, which is a biometric signature (see columns 3, line 35 – column 4, line 21), which is then hashed along with the document to verify its integrity. In light of the teachings of Smithies et al. it would have been obvious to one of ordinary skill in the art at the time of the invention to have modified the method of Matsumoto et al. to include the sender's handwritten signature in order to verify the intention of the user in inputting the data, the motivation disclosed by Smithies et al. (see column 2, lines 18-24; column 4, lines 7-21).

22. Regarding claim 7, Matsumoto et al. do not disclose encrypting the electronic file, but encrypting electronic files in addition to providing digital signatures was well known in the art at the time of the invention. For example, Smithies et al. disclose encrypting the entire electronic file, including the first and second signatures and the user signature to generate encrypted data (see abstract; column 13, lines 62-63). The encrypted data is examined by the receiver system to verify the integrity of the user input (see claim 7). In view of the teachings of Smithies et al. it would have been obvious to one of ordinary skill in the art at the time of the invention to have encrypted the electronic file in order to protect it from unauthorized access.

23. Claims 7 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al. in view of Doggett et al., U.S. Patent Number 5,677,955.

24. Matsumoto et al. do not disclose encrypting the electronic file, just signing it. They disclose transmitting the electronic file to a receiver system, but do not specify the Internet or dial-up as transmission media. However, encrypting electronic files in addition to providing digital signatures was well known in the art at the time of the invention. Using the Internet or dial-up for sending data was well known in the art at the time of the invention. For example, Doggett et al. discloses a system of transmission of an electronic document containing one or more signatures over the Internet (see column 10, lines 22-29). Likewise, Doggett et al. disclose encrypting the document in addition to digitally signing it for confidentiality (see column 20, line 57 – column 21, line 2). In light of the teachings of Doggett et al. it would have been obvious to one of ordinary skill in the art at the time of the invention to have encrypted the electronic file and the signatures to generate encrypted data to be examined for integrity by the receiver system in order to ensure confidentiality. It would have been obvious to send the data to the receiver system via the Internet, an efficient and popular mode of communication.

25. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al., as outlined above, in view of Serret-Avila et al., U.S. Patent Number 6,785,815.

26. Matsumoto et al. disclose rules regarding whether the corresponding section can be modified or not (see column 6, lines 21-26).

27. Matsumoto et al. do not, however, disclose rules restricting access to printing. Nevertheless, Serret-Avila et al. disclose a method of authenticating an electronic document or portion thereof using digital signatures (see column 2, lines 56-67). Serret-Avila et al. disclose rules regarding whether the corresponding section can be printed or not (see column 4, line 59 – column 5, line 9).

CONCLUSION



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28. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel M. Ungar whose telephone number is 571.272.7960. The examiner can normally be reached on 8:30 - 6:00 Monday - Thursday, Alt. Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571.272.3799. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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